Authors Andersson & Gledhill 2013 Source Title
Ocean acidification and coral reefs: effects on breakdown. dissolution, and net ecosystem calcification
Interacting effects of ocean acidification and warming on growth and DMS-production in the haptophyte coccolith Arnold et al. 2013 Global Change Biology 19, 1007-1006 Asnaghi et al. 2013 Barros et al. 2013 Barton et al. 2012 PLOS 8(4): e61978 J of Exp Mar Biol and Ecol 440; 200-206 Limnol. Oceanogr., 57(3), 2012, 698-710 Effects of sea water acidification on fertilization and larval development of the oveter Crassostrea sleas
The Pacific outer. Crassostrea sizes, shows neastive correlation to naturally elevated carbon dioxide levels: implications for near-term ocean acidification effects
Summertime calcium carbonate understandation is neith waters of the western Actic Corean - how biological processes exacershate the impact of ocean acidification Description and quantification of oteranod shell dissolution: a sensitive bioindicator of ocean acidification Bednaršek et al. 2013 Global Changes Biology 18, 2378-2388 Limacina helicina shell dissolution as an indicator of declining habitat suitability owing to ocean acidification in the California Current Ecosystem Redoorfel et al. 2014 Proceedings B of the Bourl Society 391: 20140122 "Fed" Up with Acidification: "Trusting" the Federal Government to protect the Tulalip Tribes' Access to Shellfish Beds Bertelsen 2016 Washington Journal of Environmental Law and Policy, 2016 Ocean acidification alters the otoliths of a pantropical fish species with implications for sensory function PNAS 110(18): 7366-7370 Bignami et al. 2013 Response to ocean acidification in larvae of a large tropical marine fish Rachycentron canadum Ocean acidification science needs for natural resource managers of the North American west coast Early reproductive stages in the crustose coralline also Phymatolithon lenormandii are stronely affected by mild ocean acidification Detrimental effects of ocean acidification on the economically important Mediterranean red coral (Corollium rubrum) Global Change Biology 19:1897-1908 Bramanti et al. 2013 Impacts of ocean acidification on marine seafood Potential impacts of ocean acidification on the Puget Sound food web PFF (access) of Marries Column (2012), 20(4), 822-822 Shell Condition and Survival of Puget Sound Pteropods Are Impaired by Ocean Acidification Conditions Busch et al. 2014 PLOS ONE 9(8): 1-12 Integrative and Comparative Biology 53(4); 582-596 Global Change Biology 19, 2264-2275 The Journal of Experimental Biology 216, 1412-1422 Multistressor impacts of Wormina and Acidification of the Ocean on Marine Invertebrated: Life Histories
Vulnerability of the calcifiving broad issued of the Actarctic sea urchin Sterechinus neumaver! to near-future cosm acidification and warming
mouse of one acidification on metabolism and enterest solving early life states of the intertials occurate and Petrointhies excloses
effects of ocean acidification on early life-lethory stages of the intertial procedure hard Petrolishes circloses
effects of ocean acidification on early life-lethory stages of the intertial procedure hard Petrolishes circloses Ceballos-Osuna et al. 2013 J of Exp Biol 216, 1405-1411 Sensitivity of coral calcification to ocean acidification: a meta-analysis Chan & Connolly 2012 Global Change Biology 19, 282-290 Persistent spatial structuring of coastal ocean acidification in the California Current System Chan et al. 2017 Scientific Reports 7: 2526 Ocean acidification slows retinal function in a damselfish through interference with GABAAreceptors J Exp Bio 217, 323-326 Chung et al. 2014 Effects of CO2-induced ocean acidification on physiological and mechanical properties of the starfish Asterias rubens Coral reef calcifiers buffer their resoonse to ocean acidification usine both bicarbonate and carbonate Effects of feedine and lieht intensity on the resoonse of the coral Porites rus to ocean acidification The other ocean acidification problem: CO2 as a resource among competitors for ecosystem dominanc Connell et al. 2013 Corpwall et al. 2013 Philosphical transactions of the Royal B Society 368:20120442 Limnol. Oceanogr. 58(1), 121-130 Concentration boundary lavers around complex assemblages of macroalgae: implications for the effects of ocean acidification on understory coralline algae Diurnal fluctuations in seawater pH influence the response of a calcifying macroalga to ocean acidification CO2-induced ocean acidification impairs calcification in the tropical urchin Echinometra viridis Have we been underestimating the effects of ocean acidification in zooplankton? Ocean acidification does not impact shell growth or repair of the Antarctic brachiopod Liothyrella uva (Broderip, 1833) nal of Experimental Marine Biology and Ecology 462 (2015) 29–35 Journal of Experimental Mail Geology J. Phycol. 48, 32–39 (2012) Coral macrobioerosion is accelerated by ocean acidification and nutrients
INTERACTIONS BETWEEN CEAN ACIDIFICATION AND WARKINGS ON THE MORTALITY AND DISSOLUTION OF CORALLINE ALGAE
Odor tracking in Janks is reduced under future ocean acidification conditions Dixson et al. 2015 Global Change Biology (2015) 21, 1454-1462 Trans-life cycle impacts of ocean acidification on the green sea urchin Strongylocentrotus droebachiensis PhD thesis, University of Gothenburg, Department of Biological and Environmental Sciences Dorey 2013 Ocean acidification and temperature rise: effects on calcification during early development of the cuttlefish Sepia officinalis Dorey et al. 2013 Ocean acidification reduces coral recruitment by disrupting intimate larval-algal settlement interactions Is Ocean Acidification an Open-Ocean Syndrome? Understanding Anthropogenic Impacts on Seawater pH Duarte et al. 2013 Journal of the Coastal and Estuarine Federation 43, 7-10 Effects of seawater temperature and pH on the boring rates of the sponge Cliona celata in scallop shells Duckworth and Peters Dupont & Thorndyke Dupont et al. 2013 Edmunds et al. 2012 Ellis 2013 Marine Biology, 160:27-35 DIRECT IMPACTS OF MARR-HUTURE OCCAN ACCIDECTATION ON SEA URICHING
Lone term and urban-life coids effects of electrose of encourage to can administration the encourage varieties of encourage constructions and instruction effects of encourage and editionation and term encourage on the social securities coals from Moores, French Polymeis
The immort of occan acidification, increased seawarder temmerature and a bacterial challence on the immune resonant and enholicities of the blue muscel. Meritis
Combined effects of two access through partial acciditations, in criterization and engine expension of the blue muscel. Meritis
Combined effects of two access through partial acciditations, in criterization and engine expension and enholicities of the blue muscel. Meritis
Combined effects of two access through partial accidence in criterization and expension of the blue muscel. Meritis
Combined effects of two access through partial accidence in contributions of the processing of the partial accidence in the combined partia Mar Biol (2013) 160:1835–1843 Global Change Biology 18, 2173-2183 PhD thesis, University of PlymouthScho Polar Biology, 35: 1027-1034 J Comp Physiol B, published online May 12, 2012 J. Geophys. Res 116, C05012 Biogeosciences, 11, 365-379 Impacts of ocean acidification on respiratory eas exchange and acid-base balance in a marine teleost. Obsanus beta Seasonal cycle of surface coean pCO2 on the Oregon Shelf Calcium carbonate corrobivity in an Abskaan in Fabricius et al. 2013 Proceedings B of the Royal Society. 281: 20132479 Interactive effects of ocean acidification and rising sea temperatures alter predation rate and predator selectivity in reef fish communities Global Change Biology, 21: 1848-1855 Journal of Experimental Marine Biology and Ecology 418–419 (2012) 30–36 Ocean acidification induces multi-generational decline in cooggod naugilar production with possible conflict for reproductive resource allocation Ocean acidification impacts mussel control on biomineralisation Ocean acidification with (deleutrophication will alter future phytoplankton growth and succession Proceedings B of the Royal Society, 282: 20142604 Flynn et al. 2015 Adaptive Capacity of the Habitat Modifying Sea UrchinCentrostephanus rodgersil to Ocean Warming and Ocean Acidification: Performance of Early Embryos Eno et al. 2012 DI OS ONE 7/9)- 1-9 Gaugin perceptions of ocean acidification in Alaska Frisch et al. 2015 Marine Policy 53, 101-110 Gazeau et al. 2013 Mar Biol (2013) 160:2207-2245 Impact of ocean acidification and warming on the Mediterranean mussel (Mytilus galloprovincialis) Gazeau et al. 2014 Frontiers in Marine Science, Vol 1, article 62 ation control related to population density under ocean acidification Effects of ocean acidification on sponge communities Marine Ecology (2013) 1-9 Rapid Progression of Ocean Acidfication in the California Current System Gruber et al. 2012 Science June 15, 2012 CO2-induced ocean acidification increases anxiety in Rockfish via alteration of GABAA receptor functioning Hamilton et al. 2014 Proceedings B of the Royal Society, 281: 20132509 Aragonite saturation state dynamics in a coastal upwelling zone Harris et al. 2013 Geophylscal Research Letters, 40, 2720-2725 Meta-analysis reveals complex marine biological responses to the interactive effects of ocean acidification and warming Harvey et al. 2013 Short-term metabolic and growth responses of the cold-water coral Lophelia pertusa to ocean acidification Deep-Sea Research II99(2014)27-35 Hennige et al. 2013 Persistent carry-over effects of planktonic exposure to ocean acidification in the Olympia oyster Hettinger et al. 2017 Ecology, 93(12), 2012, pp. 2758-2768 The influence of food supply on the response of Olympia oyster larvae to ocean acidification Hettinger et al. 2013 Biogeosciences, 10, 6629-6638, 2013 Hettinger et al. 2013 Global Change Biology doi: 10.1111/gcb.12307 Physiological Impacts of devaled curron ocones are usual natural networks and the second ocones are usual natural networks.

ARI J PRISAM neque study.

ARI Heuer and Grosell 2014 (L.)
Exploring local adaptation and the ocean acidification seascape – studies in the California Current Large Marine Ecosystem Hofman et al. 2014 Biogeosciences, 11, 1053-1064, 2014 The Geological Record of Ocean Acidification Honisch et al. 2012 Science 335, 1058 Ocean acidification decreases the light-use efficiency in an Antarctic diatom under dynamic but not constant light New Phytologist, doi: 10.1111/nph.13334 Hoppe et al. 2015 Energy metabolism and regeneration are impaired by seawater acidification in the infaunal brittlestar Amphiura filiformis Hu et al. 2014 J Exp Bio 217, 2411-2421 Resiliency of Juvenile walleye pollock to projected levels of ocean acidification Hurst et al. 2013 Aquatic Biology 17: 247-259 Effects of ocean acidification on hatch size and larval growth of walleye pollock (Theragra chalcogramma) Coral reef calcification: carbonate, bicarbonate and proton flux under conditions of increasing ocean acidification Proceedings B of the Royal Society 280: 20130031 Adverse Effects of Ocean Acidification on Early Development of Squid (Doryteuthis pealeii) Kaplan et al. 2013 PLOS ONE, 8(5) Global Change Biology 19, 2536-2546 Kelly et al. 2013 Effect of ocean acidification on the benthic foraminifera Ammonia sp. is caused by a decrease in carbonate ion concentration Keul et al. 2013 Biogeosciences 10, 6185-6198 The Impact of Ocean Acidification on the Functional Morobology of Foraminifera PI OS ONE 8(12) Climate change and ocean acidification effects on seagrasses and marine macroalgae Koch et al. 2013 Ocean acidification causes ecosystem shifts via altered competitive interactions Kroeker et al. 2012 Nature, published online September 9, 2012 Impacts of ocean acidification on marine organisms: quantifying sensitivities and interaction with warming Global Change Biology (2013) 19. 1884-1896 Kroeker et al. 2013 Predicting the Effects of Ocean Acidification on Predator-Prey Interactions: A Conceptual Framework Based on Coastal Molliuscs Kroeker et al. 2014 Biol. Bull. 226: 211-222 Ocean acidification reduces biomineralization-related gene expression in the sea urchin. Hemicentrotus pulcherrimus Effect of ocean acidification on growth, gonad development and physiology of the sea urchin Hemicentrotus pulcherrimus Effect of ocean acidification on the fatty acid composition of a natural plankton community Leuetal 2013 Biopensciences 10, 1143-1153 Sensitivity to ocean acidification parallels natural pCO2 gradients experienced by Arctic copepods under winter sea ice Lewis et al. 2013 PNAS published online December 2, 2013, doi/10.1073/pnas.131562110 Effect of ocean acidification on cyanobacteria in the subtropical North Atlantic Lomas et al. 2012 Aquatic Microbial Ecology, 66: 211-222 Effects of Ocean Acidification on Juvenile Red King Crab (Paralithodes camtschaticus) and Tanner Crab (Chionoecetes bairdi) Growth, Condition, Calcification, and PLOS ONE 8(4) Long et al. 2013 Survival

Ocean acidification and responses to predators: can sensory redundancy reduce the apparent impacts of elevated CO 2 on fish? Effects of ocean acidification on the calcification of otoliths of larval Atlantic cod Gadus morhua Mannia et al 2012 Marine Ecology Press Series 477: 251-258 Ocean Acidification Disrupts Prey Responses to Predator Cues but Not Net Prey Shell Growth in Concholepas concholepas (loco) Manriquez et al. 2013 PLOS ONE 8(7) McKibben et al. 2017 PNAS. doi/10.1073/pnas. 1606798114 ment of Euphausia pacifica (krill) larvae is impaired under p CO2 levels currently observed in the Northeast Pacific Marine Ecology Press Series, vol 555: 65-78 McLaskey et al. 2016 Effects of ocean acidification and elevated temperature on shell plasticity and its energetic basis in an intertidal gastropod Future ocean acidification will be amplified by hypoxia in coastal habitats Meizner et al. 2013 Mar Biol (2013) 160:1875-1888 Exposure to low pH reduces survival and delays development in early life states of Dungeness Crab (Concer magister) Miller et al. 2016 Mar Biol (2016) 163-118 Puget Sound Marine Waters, 2011 Overview Moore et al., eds. 2012 Puget Sound Partnership report

Nature Climate Change, published online April 13, 2014; doi: 10.1038/NCLIMATE2195

ehavioural impairment in reef fishes caused by ocean acidification at CO2 seeps

Munday et al. 2014

Consequences of a simulated rapid ocean acidification event for benthic ecosystem processes and functions Murray et al. 2013

Offspring sensitivity to ocean acidification changes seasonally in a coastal marine fish Murray et al. 2014

Meyer 2016

Impact of medium-term exposure to elevated pCO2 levels on the physiological energetics of the mussel Mytilus chilensis Navarro et al. 2013

Emerging Understanding of seagrass and kelp as an ocean acidification management tool in California Nielsen et al. 2018

Acidic Ocean Hits Pacific Northwest Niller, 2013

Pacific Fisheries Environmental Laboratory Upwelling Indices MOAA

Physiological responses of three temperate coralline algae from contrasting habitats to near-future ocean acidification

Noisette et al. 2013 O'Donnell et al. 2013

First Bienniel Report to the Legislature and Ocean Policy Advisory Council. September 15, 2018 Oregon Coordinating Council on Ocean Acidification and Hypoxia, 2018

Seagrass habitat metabolism increases short-term extremes and long-term offset of CO2 under future ocean acidification Pacella et al. 2018

Experimental ocean acidification alters the allocation of metabolic energy Pan et al 2015 Predicting the Response of Molluscs to the Impact of Ocean Acidification Parker et al. 2013 Pteropods counter mechanical damage and dissolution through extensive shell repair

Peck et al. 2018 Ocean ecosystem indicators of salmon marine survival in Northern California Current

Historical baselines and the future of shell calcification for a fuoundation species in a changing ocean

Direct and indirect effects of ocean acidification and warming on a marine plant-herbivore interaction Poore et al. 2013

The physiological and molecular responses of larvae from the reef-building coral Pocillopora damicomis exposed to near-future increases in temperature and pCO2

Marine Biology 160: 2157-2173 Putnam et al. 2013 Seasonal curbonate chemistry covatiation with temperatuer, oxygen and salinity in a fjord estuary: implications for the design of ocean additication experiments

FLOS ONE Vel 9, issue 2, 1-12

Reum et al. 2014

Ocean acidification and warming scenarios increase microbioerosion of coral skeletons Reyes-Nivia et al. 2013 Effects and mitigations of ocean acidification on wild and aquaculture scallop and prawn fisheries in Queensland. Australia

Richards et al. 2015 Lessons learned from ocean acidification research Riehsell and Gattuso 2015

Arctic ocean acidification: pelaeic ecosystem and biogeochemical responses during a mesocosm study Riehsell et al 2013

Ocean acidification increases the toxicity of contaminated sediments Roberts et al 2013

Differential impacts of ocean acidification and warming on winter and summer progeny of a coastal squid (Loligo vulgaris) Rosa et al. 2014

Ocean Acidification-Induced Food Quality Deterioration Constrains Trophic Transfer Rossoll et al. 2012

Ocean acidification shows negligible impacts on high-latitude bacterial community structure in coastal nelagic mesocosms Using the Clean Water Act to tackle ocean acidification: when carbon dioxide pollutes the oceans

Impact of ocean acidification on escape performance of the king scallop, Pecten maximus, from Norway

Schalkhausser et al. 2013 Individual Variability in Reproductive Success Determines Winners and Losers under Ocean Acidification: A Case Study with Sea Urchins

Schlegel et al. 2012 Ocean acidification impacts on sperm mitochondrial membrane potential bring sperm swimming behaviour near its tipping point

Schlegel et al. 2015 Digestion in sea urchin larvae impaired under ocean acidification

Stumpp et al. 2013 Using present-day observations to detect when anthropogenic change forces surface ocean carbonate chemistry outside preindustrial bounds

Presentation: Socioeconomic Value of Shellfish in Oregon Svivia and Davis 2016 Food availability outweighs ocean acidification effects in juvenile Mytilus edulis: laboratory and field experiments

Thomsen et al. 2012 Sensitivity and adaptation potential of Mytllus edulis to ocean acidification: a multi-generational study Thomsen et al. 2014 Sensitivity of Antarctic phytoplankton species to ocean acidification: growth, carbon acquisition, and species interaction Trimborn et al. 2013

Effects of ocean acidification, temperature and nutrient regimes on the appendicularian Olkopleura dioica: a mesocosm study Climatic modulation of recent trends in ocean acidification in the California Current System

Turi et al 2016 Ocean Acidification Reduces Growth and Calcification in a Marine Dinoflagellate

Van de Waal et al. 2013 Venn et al. 2013

Effects of Ocean Acidification and Warming on Sperm Activity and Early Life Stages of the Mediterranean Mussel (Mytilus galloprovincialis) Vihtakari et al. 2013 Ocean Acidification in the Coastal Zone from an Organism's Perspective: Multiple System Parameters, Frequency Domains, and Habitats

Saturation-state sensitivity of marine bivalve larvae to ocean acidification

Waldbusser et al. 2014 A developmental and energetic basis linking larval oyster shell formation to acidification sensitivity

Waldburrer et al. 2012 Ocean acidification has multiple modes of action on bivalve larvae

Waldbusser et al. 2015 Wang et al 2017

Ocean acidification reduces induction of coral settlement by crustose coralline algae Webster et a. 2013 Ocean Acidification Accelerates Reef Biogrosion

Sensitivities of extant animal taxa to ocean acidification

Wittman & Portner 2013 Effects of ocean warming and acidification on survival, growth and skeletal development in the early benthic juvenile sea urchin (Heliocidaris erythrogramma)

Wolfe Ft al. 2013 Climate change and ocean acidification impacts on lower trophic levels and the export of organic carbon to the deep ocean Yool et al. 2013

Marine Pollution Bulletin 73: 435-442 Marine Ecology Press Series 504: 1-11

The Atlantic, September 13, 2016

Working Group of the Ocean Protection Council Science Advisory Team and California Ocean Science Trust report

Chemical and Engineering News, vol 91: 12: 36-37

J Exp Marine Biol & Ecol 448: 179-187

Nature Climate Change, published online March 10, 2013; doi: 10.1038/NCLIMATE1846

PNAS, doi/10.1073/pnas. 1703445115

PNAS 112(15) Biology 2: 651-692

> Nature Communications (2018)9:264 unpublished: https://www.nwfsc.noaa.gov/

Global Change Ecology, published online May 15, 2013

Global Change Biology 19: 1919-1929 Fisheries Research 161 (2015) 42-56

Nature Climate Change Vol 5, pg. 12-14 Biogeosciences 10 5619-5626 2013 Global Change Biology (2013) 19 340-351

J Exp Bio 217, 518-525

PLOS ONE 7(4)

ntal Law and Policy Vol 6:2

Mar Biol (2013) 160:1995-2006 PLOS ONE 7(12)

J Exp Bio 218, 1084-1090 Nature Climate Change, published online October 20, 2013, doi: 10.1038/NCLIMATE2028

Biogeosciences, 12, 2065-5083

Inint Interim Task Force on Orezon Shellfish. Salem. Orezon. July 21, 2016 Global Change Biology doi: 10.1111/gcb.12109

2014 Ocean Sciences Meeting abstract

Limnol. Oceanogr. 58(3), 997-1007

Environ Res Lett 11 (2016) 014007

PLOS ONE 8(6)

PNAS 110(5)

Water 5, 1890-1915

Nature Climate Change Vol 5, pg. 273-280

Georghaireal Research Letters 40: 2171-2176

PLOS ONE DOI:10.1371/journal.pone.0128376 ICES Journal of Marine Science, 74(7), 1906-1920

Global Change Biology 19, 303-315

Nature Climate Change, published online August 25, 2013, doi: 10.1038/NCLIMATE1982

Global Change Biology 19, 2698-2707

Biogeosciences, 10, 5831-5854, 2013